

Iowa Institution for the Education of
the Deaf and Dumb (Iowa State School
for the Deaf), Main Building
East of the intersection of South
Avenue and State Route 92
Council Bluffs
Pottawattamie County
Iowa

HABS
IOWA
78-CDUB,
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

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HISTORIC AMERICAN BUILDINGS SURVEY

IOWA INSTITUTION FOR THE EDUCATION OF THE DEAF & DUMB, MAIN BUILDING
(IOWA STATE SCHOOL FOR THE DEAF, MAIN BUILDING) HABS No. IA-53

Location: To the east of the intersection of South Avenue and State Highway 92. Council Bluffs, Pottawattamie County, Iowa.

Statement of Significance: Although the building is no longer standing, the documentation shows that it was an example of complex architectural planning of interior spaces, and its construction was intelligently phased over a development period of many years. However, the state legislature was not able to fund the development stages properly, nor were the builders in western Iowa yet able to carry out a project of this size expeditiously.

HISTORICAL INFORMATION

Physical History

1. Dates of erection: Center portion and east wing, 1868-1870 (16, p. 3; 17, p. 13); west wing, 1876-1878 (10, p. 148); center portion and east wing rebuilding, 1878-1880 (10, p. 149); destroyed by fire in 1902 (10, p. 150).
2. Architect: Schwartz and Dilger, Springfield, Illinois (12, pp. 6, 14).
3. Original and subsequent owners: State of Iowa.

4. Builder, contractor, suppliers:

General contractor: W. R. Craig of Nebraska City,
Nebraska (16, pp. 3, 9, 12).

Superintendent: William Ward, "an architect of experience
and ability" (16, p. 3, 17).

Suppliers: Not known.

5. Original plan and construction:

Architectural Program.

In 1868, the Commissioners to Locate the Institution
for the Deaf and Dumb at Council Bluffs reported that
they had chosen for the Institution a site of eighty acres
located about two miles south of the courthouse, half a
mile out of the Council Bluffs city limits, and on the
public road to Glenwood.

The land was a portion of the Missouri River bottom
above highest known flood level, rising up on the side
of a bluff at the east. From the elevated portion there
was a good view, and it was realized that a building
there would present an imposing appearance, but that its
water supply would be lost. The state was asked to buy
an additional ten acres immediately to the east. The
original eighty acres were given to the state by the
citizens of Council Bluffs; the added ten acres were also
procured at no expense to the state (12, pp. 3, 4; 13,
pp. 1, 2; 1, p. 3).

At this time the institution had been operating in
Iowa City, which is located in the eastern quarter of the

state, occupying buildings which were "entirely unfitted for its use". The General Assembly had passed an act on 3 April 1886 which provided for moving the school to Council Bluffs, at the western edge of the state, and for procuring bids for a new building there. The principal of the school wanted speedy construction of new buildings, but he doubted the wisdom of the projected move, because the center of population remained in the eastern part of Iowa, a fact that would require most of the students to cross the state when traveling between home and the school (14, pp. 6, 18; 10, p. 148). It would appear that political factors rather than practical ones prevailed in the choice of the Council Bluffs location. When the school opened, however, four railroads in the state offered help by giving reduced rates to the pupils (15, p. 23).

The Commissioners for locating the school at Council Bluffs were wisely concerned with the ever-present problems of adapting institutional buildings to institutional growth. Especially they were concerned with the high cost of remodeling buildings, and they wisely decided to "devise a plan which, while it will suit the wants of the State for ten or twenty years to come, may, without any material alterations, but by future additions already contemplated in the original plan, be made to suit the constantly increasing numbers which, generation after generation, may seek to enjoy its advantages". In the architectural

plans selected, the first thirteen sheets dealt with the building then to be constructed and the remaining four showed at smaller scale the same building plus additions for the future. The first stage of construction showed an institution for about two hundred students. The enlargement showed the original buildings "somewhat modified as to their original arrangement, and having added to them other buildings in the rear which [together are] capable of accommodating not less than twice the original number" (12, pp. 5, 6).

Architectural Design.

In order to obtain architectural services -- and these appear to have been limited to the preparation of plans for the building -- a circular letter was addressed to architects explaining the preceeding considerations. The letter was sent to as many architects as the commissions' means would permit. A \$500 premium was offered "for the best plan of an Institution which should accommodate not less than 200 pupils, and so constructed that, without material changes, except by additions that would not destroy the harmony of the whole, it might be made to accommodate double that number of pupils". The plans of Schwartz and Dilger of Springfield, Illinois, were adopted, and the firm was paid the premium for the best plans (12, pp. 5, 6). The names of three other architects who submitted plans are also known. In one case the accident of a fire caused two of the architects to request payment for their destroyed plans -- Edward C. Caldwell of Boston,

Massachusetts, and S. B. Elliott of Mansfield, Pennsylvania. Together their requests for reimbursal for the loss came to \$200 (12, pp. 3, 14). This circumstance further confirms the indication of what the nature of architectural services was -- the provision of plans -- and suggests that these drawings were items of value in themselves that architects might make use of for other clients, not instruments of service, which is the present viewpoint of the architectural profession. The name of the third architect, Alexander Jackson Davis of New York, is of some interest because of his national reputation.

A. J. Davis was in partnership with Ithiel Town from 1829 to 1844, during which time the firm designed the Colonnade Row apartments and the United States Subtreasury Building in New York and the State Capitol in Columbus, Ohio, all in the Greek Revival style (11, pp. 84, 88). After Town's death, Davis continued in practice, often designing in the Tuscan style. His submission for the Institution in Council Bluffs appears in this style -- a very late example -- and closely resembles his design for the North Carolina Hospital for the Insane in Raleigh in 1850 (19, plate 30). The exterior elevation shows alternate arrangements for a two-story or a three-story building, and the plans show a scheme of rooms arranged around a square courtyard and one of rooms arranged around a circular courtyard. The drawing shows little more than a perfunctory disposition of rooms, representing either the most

preliminary of architectural plans or a very low level of professional service.

Schwartz and Dilger's specifications contained a description of the building. "The style selected for the building is the 'Italian Romanesque', which combines strength, durability, comfort, elegance, taste and good proportions without increasing the cost of construction... The entire outside of the building is constructed of stone and brick, including the cornice [changes were made here later], wood being only used in the construction of the observatory, and in the manufacture of window frames, sashes and doors". Ceiling heights (space between floor to ceiling) are given as 12 feet for the basement, 14 feet for the first and second floors, 16 feet for the central portion of the third floor and 14 feet in the wings, and 13 feet for the fourth story (12, p. 25). The general form of the building was that of a main central portion with a wing for male students extending farther in the same direction at one side and a wing for females similarly placed at the other side. Persons from each wing reached the central part of the building directly "without the necessity of passing through the corridors of the other sex". Each wing had two flights of stairs from basement to third floor so that the pupils did not have to use the corridors of the main building nor its principal stairway, which was reserved for the use of officers, teachers, and visitors. The corridors were spacious and unobstructed

by stairs, and both stairs and corridors were well lit and the corridors well ventilated (12, pp. 23, 25).

At basement level were the dining hall, kitchen, and bakery, all in the central portion of the building. Each wing connected to the dining hall, but there was no other intercommunication between wings at this level. At the rear of the building, there was an entrance to each wing. The kitchen and bakery also had a common entrance in the rear, but they were shut off from the rest of the building except for "slides in the wall" of the dining hall (12, p. 23).

At the first floor in the main portion of the building one entered at the center, where the reception, baggage, and visitors attendant's rooms were nearby. There was a rear entrance "with passages to the front along the principal stairs". Close to the male wing were the steward's rooms, and near the female wing were the matron's and lady teachers' rooms interconnected. In addition, the main portion contained various other offices, a reading room, and a library. At each of the wings there were additional entrances for the pupils, who were not to use the main entrance. In the male wing a boys' study room with book room connected to the other floors, but not to the superintendent's private rooms nearby, which were separated by means of two pair of folding doors in the corridor. These rooms were accessible from the main building and from the entrance to the male wing, this second entrance serving as a private entrance for him. His rooms had a dumbwaiter so

that meals could be served from the dining room. The wing also included spare rooms for guests, physicians, etc. In the female wing were the ironing room, the dress-making room, the store room for materials and implements, the girls' study, and the bathroom for use of female employees (12, pp. 23, 24). On the second floor there were eight schoolrooms in the main portion of the building and in each wing one schoolroom for the primary department. In the male wing there were a large dormitory for boys, a "dormitory for high class boys", a washroom connecting to both dormitories, spare rooms for boarders, and bathrooms. The dormitory and washroom facilities were similar for girls in the female wing, and there were a parlor for high class girls, bathrooms, and an assistant matron's room (12, p. 24).

At the third floor there was a chapel at the middle of the main part of the building "cutting off communication between the two wings", plus two rooms accessible only by the principal stairs, for use as teachers' private rooms. At each side, and only accessible respectively from the male and the female wing, were the boys' hospital and convalescent room and the girls' hospital and convalescent room. In the male and female wings the dormitories, washrooms, and bathrooms of the second floor reoccurred. In the male wing were also the physician's office and dispensary, the boys' attendant's room, store room for bedding, and dormitories for male boarders. In

the female wing were a linen room in connection with the second assistant matron's room and dormitories for female boarders (12, p. 24, 25).

The fourth floor extended over the main building. Its use was not definite - possibly for common festivals (12, p. 25).

The specifications call for foundations to be concrete composed of Louisville cement. The basement walls were to be rubble masonry solidly laid for its full thickness. Limestone sills, belting course, copings and steps were called for with cramps and anchors where "required by the superintendent". Sand brick was allowed where not exposed to the weather. In addition to chimneys, there were brick flues for ventilation with "Emmerson's Caps" and with an ornamental iron register at the floor and one at the ceiling of each room served. Milwaukee pressed brick was called out for the cornice, the turrets, and other ornamental work. The turret brick was to be white. There were four 80-barrel capacity cisterns fed by a brick sewer. In the basement were three-and-a-half-foot-deep "bathing basins" of brick with a Louisville-cement mortar inside finish. The mason was called on to "furnish and put up a first class iron range in the kitchen, in the usual manner, with red pressed brick" and with "a water back attached". The interior construction of the building was the usual wood joist floor system, with wooden girders and eight-inch diameter iron columns. Wood-stud partitions

were used, with wood lath and plaster walls and ceilings. The roofing was "leaded roofing tin", locked and soldered, with two coats of paint, and gutters and leaders were of "galvanized sheet iron". Windows were wooden sash with cast-iron counterweights. Doors were of white pine, thoroughly seasoned. All doors had hardwood thresholds and all but closet doors had transoms. American mortice locks were generally used for the doors. In all dormitories and single rooms cleats with double iron hooks not more than eight inches apart were to be installed where directed. The kitchen sink was of 1 1/2 inch wooden plank with the angles grooved together and set in lead and oil with a board for a pump. The six wash tubs in the laundry were of similar construction. The main stairway was of cut stone, the rest of wood with balusters of ash and hand-rail of black walnut. The observatory was of wooden construction. Interior woodwork was painted white on the first floor and in color elsewhere. Exterior window frames were painted brown and all "outside doors to be grained in oil and varnished, to imitate oak". All glass was "to be best American cylinder glass", except that "the outside and vestibule doors to have enameled pannels [sic] and transoms, the glass for the same to be double French, and the ornamentation to be of a neat pattern, as will be directed". Storage tanks under the roof supplied bath tubs, wash basins, water closets, wash tubs, bathing basins, kitchen sink, water backs of the range, and

heating apparatus. Hot and cold water was to be furnished, heated in 200-gallon copper boilers. Force pumps were supplied in kitchen, laundry, and cellar. Lead pipe was used. Bathtubs were enameled iron, as were the wash basins in the washrooms. Bathroom floors were covered with lead, and inclined to a drain. Showers were provided in some of the bathrooms. Twelve attic ventilators of galvanized iron were provided. Two automatic gas machines provided gas for lighting, and the building was piped for gas. Two "patent low-pressure, self regulating steam, warming and ventilating apparatus" of Baker, Smith and Co. were specified. "Wherever practicable, the rooms must be warmed through registers placed in the wall, with the heating surfaces beneath. All other rooms to be warmed by tubular radiators, placed directly within them". The contractor was required to guarantee that the heating and ventilating apparatus would produce specified temperatures in specific rooms "in the coldest weather" -- 100° in the drying rooms, 50° in all dormitories except those on fourth floor and third floor wings, 60° in water closets, wash rooms, corridors, ironing rooms and store rooms in the basement, linen room, and bedding store room on the third floor. No heat was required in the large dormitories on the third floor of the wings; the whole fourth floor; fuel, broom and trunk rooms; private kitchen; pantry; kitchen-bakery, bakery store room, and the basement. All other apartments were to be heated to 70° (12, pp. 26 - 40).

Construction.

The building was bid upon twice, the first time as designed. For this first bidding Jacob Reichard was the lowest bidder, and a contract for \$300,000 was signed with him on 23 Dec. 1867 (12, pp. 13, 16). The General Assembly however appropriated only enough money to build the center part and one wing (10, pp. 148). On 29 July 1868 proposals were again received and on 10 Aug. 1868 the contract was awarded to W. R. Craig of Nebraska City, Nebraska, to begin the work before 1 Sept. 1868 and complete it by 1 Oct. 1870 (16, pp. 3, 9, 12). Of the three proposals received, Craig's was for \$121,500, and those of the two remaining bidders were almost half again as much. Jacob Reichard bid \$180,000 and Bond and Company \$178,028 (16, p. 3). On 1 Sept. 1868 the Commissioners for the Erection of Buildings appointed W. Ward as superintendent, a full-time position paying \$1600 a year (16, p. 3). On 30 Nov. 1868 Ward suggested that changes "in dividing the rooms will be necessary if the part of the building designed for use of one sex is to be used by both (16, p. 17). The Commissioners in their January 1870 report felt that the division of the east wing that Ward referred to would be ill advised and that the building could not be convenient until the west wing was built also. They recommended building it with the rest of the work already begun and included an estimate of \$69,680 for this work (16, pp. 23, 24). However,

the west wing was not to be added until much later.

In addition, Ward in his report of 30, Nov. 1868 made several recommendations, some for reducing the cost and some for improving the structural soundness of the building. Most of these were accepted. The most significant were to substitute a wooden cornice for the Milwaukee pressed brick cornice, tinning over the wooden cornice as part of the roof, and to omit the turrets at the corners and the fourth story over the chapel (16, pp. 18 - 21).

Late in the fall of 1868 grading was completed and foundations were begun on 29 April 1869. In mid June the contractor fell ill with severe inflammation of the eyes, and work was almost suspended for six weeks. Late in July the brickwork contract was sublet for the contractor's eyesight was permanently injured, to the extent that he could not read nor go about on a scaffolding. Further trouble developed when wet weather caused flooding of the woodlands where wood for fuel was gathered, thereby retarded brickmaking. Construction was leveled off just above the second floor joists by December 1869 and stopped for the winter (16, pp. 21, 22).

The leases for the school's quarters were to expire in October 1870 and in the event of delays in completing the new building it was thought better to defer school operation for one or two months than to remain additional time in leased quarters. It was hoped in 1869 to start

instruction in the trades -- shoemaking, tailoring and dress making, carpentry, cabinet work, and broom making -- and in farming and gardening (15, pp. 20, 21). This was presumably to take place in an industrial school building erected on the site in 1863 on the east side of the grounds (10, pp. 148, 149).

Work was resumed on 1 April 1870 and continued past the 1 October deadline until 30 Nov. 1870, when the school finally occupied the building (17, p. 13). Craig failed to complete the building on time or as required, quitting the job and forcing the commissioners to hire others to do the work needed so the school could move in. The heating system did not work as specified. The cisterns were inadequate for water supply and General Dodge had to use his influence with the Union Pacific Railroad to obtain a windmill to pump water (17, pp. 3, 8, 13). To supplement the inadequate heating, stoves were installed. The gas works froze up and were useless for two months (17, p. 5). The Commissioners wisely declined on 3 Feb. 1871 to accept the building until final settlement was made in accordance with the contract, estimating \$4,312 worth of defective carpentry work (17, p. 5). This work is described: "It is a very poor job...We presume no other so poor a job of carpenter work can be found in any other of our State buildings. The windows and doors are badly fitted and shrunken, leaving free access to the breezes of that exposed situation". The Commissioners

wanted a committee of the Legislature to visit the building (17, p. 8). This was done. The committee found the foundations satisfactory except in one corner of the wing, where the wall was badly cracked and an abutment of stone was suggested. They found the woodwork "excessively bad" as the result of the poor quality of lumber used and the lack of seasoning. Windows and doors were so open that proper heating was impossible on cold, blustering days. Floors, doors, door casings, window casings, and baseboards were shrunk leaving cracks. Repairs were needed. The committee did not recommend building the second wing "in view of many and pressing demands on the limited resources of the State". (18, p. 3 - 6).

6. Known alterations and additions: Additional facilities on the site were needed -- a barn and outbuildings, a gas house to enclose the gas works, and two or three houses for teachers' families to take them out of valuable space within the building (17, pp. 7, 8).

In 1876 the General Assembly appropriated funds for the building of the west wing, but on 25 Feb. 1877, before the west wing was completed, fire nearly destroyed the center and east wing "and rendered what had been imperfectly done uninhabitable and useless". Some of the children were sent home and some were housed in the industrial school building on the site. Work was moving ahead on the west wing in August 1877 when a tornado "destroyed

a large part of the work done". Only a few students attended in the fall (10, p. 148).

During the period from 1878-1880 "the center building was rebuilt and the educational facilities increased by the addition of a printing office..." During the period from 1880-1883 the east wing was rebuilt, thus completing the main building". The school rooms and the surroundings were improved, finally completing the original plan for the school (10, p. 149).

In the middle 1880s an artesian well 1100 feet deep was built, and this replaced the cisterns that were filled with water pumped from Mosquito Creek. Improved sewerage was constructed at this time and the grounds were improved. Mention is made of electrical generating facilities in 1892. Fire destroyed all of the building in 1902. No children were hurt. In four years a new structure replaced the old building at a cost of \$250,000 (10, pp. 149, 150).

Sources of Information

Primary or unpublished sources.

None.

Secondary or published sources.

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- (12) Iowa. Legislative Documents (1868). Vol.II. "Report of the Commissioners to Locate the Institution for the Deaf and Dumb at Council Bluffs".
- (13) ----- . "Report of Committee to Locate Deaf and Dumb Asylum at Council Bluffs".
- (14) ----- . "Seventh Biennial Report of the Iowa Institution for the Education of the Deaf and Dumb Located at Iowa City".
- (15) Iowa. Legislative Documents (1870). Vol.II. "Eighth Biennial Report of the Iowa Institution...at Iowa City".
- (16) ----- . "Report of the Commissioners for the Erection of Buildings for a Deaf and Dumb Asylum at Council Bluffs to the Governor of the State of Iowa" (Jan. 1870).
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- (18) ----- . "Report of the Joint Committee of the Fourteenth General Assembly Appointed to Visit the Deaf and Dumb Asylum at Council Bluffs".
- (19) Newton, Roger Hale. Town and Davis, Architects. New York, 1942.

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